A Discussion Paper

AN EFFECTIVE INCOME STABILIZATION PROGRAM

FOR

WESTERN GRAIN AND OILSEED PRODUCERS

October 1984

Manitoba
Agriculture

EXECUTIVE SUMMARY

Problems

1. The Western Grain Stabilization Plan is not product specific and does not provide individual producers with adequate protection when needed.

2. By emphasizing wheat production and ignoring cash cost differences between prairie producers, producers are not encouraged to adopt better cropping practices, new crops and rotations.

3. The Plan fails to recognize large differences in cash costs per acre between provinces.

4. The Plan fails to consider the impact of inflation on input costs and producer prices.

5. The Plan overlaps with other federal programs. Programs such as crop insurance and Prairie Grains Advance Payments already effectively deal with income problems associated with yield variability and cash flow.

6. The payouts under the Western Grain Stabilization Plan are not timely.

Proposed Improvements

The basic objective of the Western Grain Stabilization Plan (WGSP) must be to stabilize farm income fluctuations arising from the variation in world grain and oilseed prices and/or rising input costs. To accomplish this objective the WGSP must be modified to provide price stabilization on an individual crop basis. Each crop would therefore be assigned its own stabilization fund account. The support level associated with each crop would be based on the previous ten-year average real (deflated) price. These prices would be deflated using the farm input price index to take into account the impact of rising production costs on the producer's income. By lagging this index one time period, the support level could be announced at the beginning of the year. This would assist producers in budgeting and arranging credit financing.

The specific support level for each crop would be related to a 6% premium on sales (2% producer, 4% federal government). Different crops would therefore have different support levels as the coverage would depend on the frequency and size of the payouts relative to the 6% levy. If the formula triggered a payout for a given crop, all producers who marketed that crop during the year would receive the same per unit payout on all their eligible tonnage.

The solution should be viewed as the initial phase. The proposal could be further refined (phase two) to consider provincial production costs when establishing the support level. It could also be taken one step further by permitting participants to purchase additional protection above the maximum. In this case, the additional protection would be funded solely by an additional producer levy and, as such, the payouts would be related to this levy.

In summary, the WGSP must be revised to focus on problems associated with depressed world prices and/or rising input costs. By calculating support levels for each grain and oilseed crop based on a long-term average market price and adjusting for inflation, producers would be assured of adequate protection when needed.

INTRODUCTION

Prairie farmers have long had to cope with extreme variations in income realized from the sale of their grains and oilseeds. In recognition of these problems, farm organizations have demanded effective income stabilization programs. Over the years, the federal government has responded with such programs as crop insurance, the Prairie Grains Advance Payments Act and the Western Grain Stabilization Act.

The Western Grain Stabilization Act (WGSA) came into effect April 1, 1976. This program was designed to stabilize incomes of western grain producers by protecting them against factors which could cause sharp declines in cash flow. These factors included (a) falling commodity prices, (b) widespread inability to market grain, (c) widespread crop failures and (d) cost increases not offset by higher grain prices.

Recently, the Western Grain Stabilization Plan (WGSP) has been criticized for its lack of responsiveness to depressed farm incomes. The purpose of this paper is to identify the shortcomings of the Plan and suggest some modifications which would result in a more effective income stabilization program.

SHORTCOMINGS OF WGSP

1. Failure to be Product Specific

The WGSP was designed to stabilize the total net income or cash flow for the seven major grains - wheat, oats, barley, rye, flax, rapeseed/canola and mustard seed - grown in the Canadian Wheat Board (CWB) designated area. As calculations are based on total aggregate grain receipts and total aggregate costs, a payout would be given to all producer participants whether or not they need it. The amount of this assistance would not be related to producer needs but, rather, would be based on the producer's levy contributions in the previous three years.

2. Discourages the Adoption of Better Cropping Practices, New Crops and Different Rotations

All payout calculations are based on aggregate receipts and costs for the

seven crops. As wheat is the dominant crop, its associated costs and receipts have a significant impact on the calculations when determining if a payout is required. Serious reductions in the income received by producers for flax, canola, barley, oats, rye or mustard seed have a minimal effect and, in all likelihood, would never trigger a payout.

Equally as important is the exclusion of other crops from the Plan. For example, buckwheat, sunflowers and field peas are important cash crops in Manitoba. Yet, these crops are not eligible for support under WGSP.

3. Failure to Recognize Large Differences in Cash Costs per Acre

The 1981 Census data suggested large differences in crop production expenses. For example, fertilizer use per acre of cropland in Manitoba was 73% higher than in Saskatchewan and 30% higher than Alberta. The prevalence of summerfallowing will also impact on cash costs per acre.

4. Failure to Adjust for Inflation

The calculations in the WGSP are not adjusted for inflation in the Canadian economy or the agricultural sector. Unavoidable cash costs per acre could escalate over a given period of time at a rate much faster than the average selling price. This phenomenon would result in a reduction in the purchasing power of the farmer's net realized income.

5. Lack of Timeliness

The administrative procedure used to determine the payout (if any) results in a lengthy time delay between when the crop is marketed and when the payout is received. To bolster returns to prairie producers during periods of low cash flow and to stimulate the agricultural economy one must be assured that these cash injections are made when they are needed the most, not months later.

6. Overlaps with Other Federal Programs

To some extent, the WGSP overlaps with the crop insurance program and the Prairie Grains Advance Payments Act. These two programs were designed to compensate for serious yield reductions and to assist producers experiencing cash

flow problems due to delays in grain movement. They have been effective and have been more responsive to producer needs than the WGSP. The ineffectiveness of the WGSP is evidenced by its failure to trigger a payout in 1980 despite serious yield reductions in southern Manitoba (the worst since 1961).

PROPOSAL

The proposed solution should focus on the objective of dealing with income problems related to depressed world prices and rising input costs. Problems associated with poor yields or delays in grain movement can be dealt with effectively by the crop insurance and Prairie Grains Advance Payments programs.

To accomplish this objective, the WGSP administration would establish a support level for <u>each</u> grain and oilseed crop based on a "normal" ten-year moving average market price. This average market price would be adjusted for inflation. The suggested deflator would be the farm input price index. In this way, producers would be assured that rising production costs are taken into account when calculating the support level.

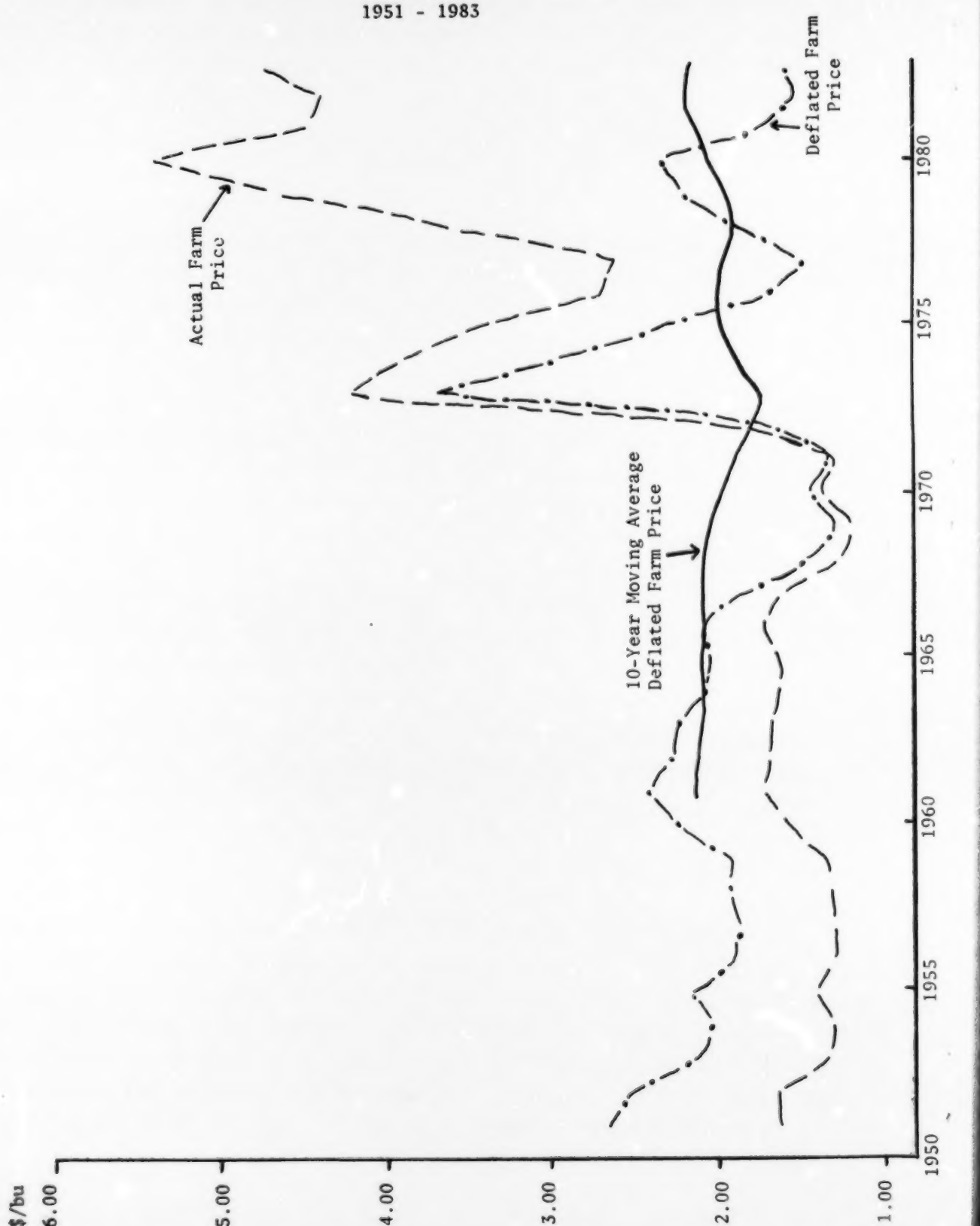
Figure 1 illustrates actual and deflated farm prices of wheat from 1951 to 1983. The solid line of actual farm prices shows an impressive increase in the average farm price since 1971. However, once adjusted for inflation, the real prices show a different picture. The "high" 1980 price of $5.52 per bushel could not buy anymore inputs or groceries than the "low" 1961 price of $1.76 per bushel. When the deflated price is compared to the previous ten-year average deflated price, the years that western farmers generally recognized as "hard times" are clearly pinpointed as 1968/71, 1976/78 and 1981/83. It is these years when deficiency payments were needed the most to stabilize producers' purchasing power.

By lagging the farm input price index one period, the necessary calculations for the support level for each crop could be done at the <u>beginning</u> of the year. Under this approach, producers would know in advance of seeding the minimum prices he can expect to realize from <u>each</u> of his stabilized crops. This Plan, in conjunction with crop insurance, would aid in budgeting and assist producers in arranging the financing of working capital and long-term credit. This policy would also permit more timely payouts as the support level would be known.

FIGURE 1

ACTUAL AND DEFLATED FARM PRICE

WHEAT
1951 - 1983



A detailed analysis of crop prices from 1976 to 1983 revealed that a 6% premium would provide a reasonable level of support for each crop. The support level of each crop would reflect each crop's past pricing experiences as the level of coverage would depend on the frequency and size of the payouts relative to the 6% levy. As new experience is added each year, the support level would be reassessed to ensure it can be financed by the levy collected. Table 1 indicates the results for each crop when the premium was restricted to 6% over the 1976 to 1983 period. Barley would be supported at the 65% level while wheat would have a support level equal to 79% of the ten-year average lagged deflated price. In terms of the frequency of payouts, wheat and barley were supported in 4 and 2 years out of the 8 years analyzed. Rye, corn and barley had the lowest frequency of payout, receiving support in only 2 years. Total payouts to Manitoba producers under the proposal would have totalled $338.7 million. The WGSP has paid only $59.3 million to Manitoba participants and $367.9 million to all producers in the four western provinces. When comparing the frequency of payouts under the WGSP and the proposed solution for the period 1976 to 1983, one clearly sees that the proposal is more price sensitive in recognizing periods of low cash flow. This results in additional monies being injected into the agricultural sector.

This procedure therefore recognizes that there are substantial differences in long-term price trends of crops. As shown in Figure 2, the real (deflated) price of canola has been trending upward while corn, wheat and sunflowers have been relatively stable. Flaxseed, barley and oats have been trending down. By basing the level of support each year on the ten-year average deflated price, one provides stability while at the same time reflecting the long-term price trend of each crop. Crops experiencing a strong demand will be supported at higher levels than those with declining demand.

The WGSP made stabilization payments in 1976/77 and 1977/78 to <u>all</u> producers across Western Canada. This proposal would stabilize <u>each</u> crop whenever the price in the marketplace falls substantially below the ten-year average deflated price (lagged). Table 2 shows when payouts would have been made for wheat, oats, barley, flaxseed, mustard seed, rye, canola, corn and sunflowers. In 1977-78 no support was required for any crop while in 1978/79 oat producers should have received a payout. Payments made on other crops were not necessary. In 1981, all crops except rye and mustard seed should have been supported. Despite the strong wheat bias in the current WGSP no assistance was provided to those crops in those years. By adopting a support level on an individual crop basis one is assured that <u>each</u> crop will realize a payout <u>when required</u>.

Although several other alternatives were considered (see Appendix 1), they were deemed infeasible.

TABLE 1

Level of Support and
Frequency of Payouts Based on 6% Premium

Calculated Over 8 Years

Crop	Estimated Support Level	Proposal's Frequency of Payouts 1976-83 (8 yrs)	WGSP's Frequency of Payouts 1976-83 (8 yrs)
Wheat	79%	4	2
Mustard Seed	73	3	2
Canola	68	3	2
Oats	66	3	2
Flaxseed	65	3	2
Barley	65	2	2
Rye	56	2	2
Sunflower	56	3	NA
Corn	54	2	NA

FIGURE 2

Ten-Year Moving Average Deflated Farm Price,
Indexed for Main Crops

MANITOBA
1961 - 1984

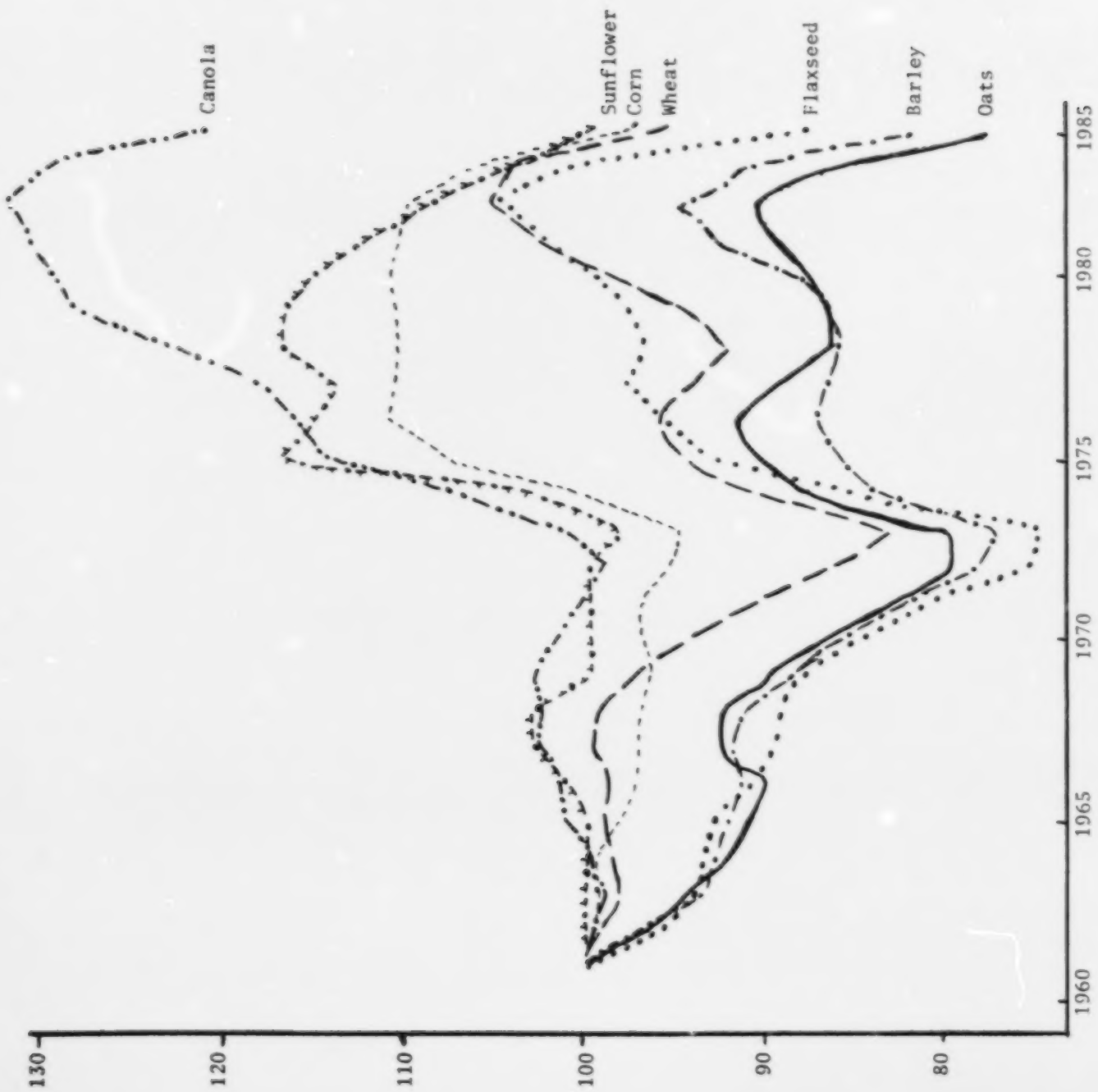


TABLE 2

Payouts by Crop Under the Proposal

1976 - 1983

Year	Wheat	Oats	Barley	Flaxseed	Rye	Canola	Corn	Mustard Seed	Sunflower
				$/bu				¢/lb	
1976	-	-	-	-	-	-	-	-	-
1977	0.07	-	-	-	-	-	-	-	-
1978	-	0.10	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	1.20	-
1980	-	-	-	-	-	0.05	-	-	1.30
1981	0.52	0.18	0.12	0.15	-	1.27	0.30	-	1.20
1982	0.87	0.50	0.75	2.58	0.62	1.87	0.44	5.30	3.70
1983	0.31	-	-	0.96	0.19	-	-	1.90	-

PROGRAM ADMINISTRATION

1. A STABILIZATION ACCOUNT WOULD BE ASSIGNED TO EACH CROP

Each crop would have a support level that could be financed by a total premium of 6%. Different crops would, therefore, have different support levels. All producers who marketed a particular crop would receive the same per unit payment for all their eligible tonnage.

2. THE SUPPORT LEVEL WOULD BE CALCULATED AT THE BEGINNING OF THE YEAR

Based on the lagged farm input price index for Western Canada (source Statistics Canada) and the ten-year moving average deflated farm price, the support level could be announced at the beginning of the year.

3. PRODUCER PARTICIPATION WOULD BE IDENTICAL TO THE CURRENT PLAN

Only actual producers who are Canadian citizens or landed immigrants may participate. Companies, cooperatives and partnerships are included if the individual members are actual producers and if the farming business is more than 50% Canadian owned.

4. PROGRAM WOULD BE VOLUNTARY. THOSE WHO DO NOT WISH TO PARTICIPATE MAY OPT OUT.

The change suggested here is to not permit an opted out producer from participating in future payouts. In otherwords, a producer who opts out would not retain any right to payouts in the next two years. Similarly, a producer who retires would not be permitted to assign or transfer stabilization benefits.

5. PRODUCER LEVY CONTRIBUTIONS WOULD BE BASED ON 2% OF SALES

All grain sales through licensed elevators and seed processors as well as crop insurance settlements and farm-to-farm pedigreed seed sales supported by recognized documentation are eligible for levy payment to an individual maximum ($60,000) of sales.

For producers with sales less than $60,000, the tonnage of each crop sold (and hence eligible for stabilization) must be recorded.

For producers with sales in excess of $60,000, all marketings of all crops (volumes and prices) must be recorded whether or not levy was collected. This data would be used to pro-rate a producer's total sales for the crop year to the stipulated maximum. For example:

	Producer Marketings	Eligible Marketings
Wheat	$ 30,000 (30%)	$18,000
Barley	20,000 (20%)	12,000
Canola	50,000 (50%)	30,000
TOTAL	100,000	60,000

By adopting this procedure, marketing decisions made by producers would not distort payout calculations. To do otherwise would open the program to manipulation by larger producers to the extent that they can determine the timing of marketings of specific crops. When the maximum levy has been paid, a maximum levy paid endorsement sticker would be affixed in his permit book.

6. DETERMINING WHETHER A PAYMENT WILL BE MADE

The determination of a payout could be made as soon as a reliable estimate of the average price for each crop was available. The payout would be the difference between the support level that was established at the beginning of the year and the deflated market price. This deflated deficiency payment would then be converted into current dollars. If the formula triggers a payout for a given crop, all producers who marketed that crop would receive the same per unit payment on all their eligible tonnage.

7. PROVISION TO VARY THE SUPPORT LEVEL

The support levels for each crop have been based on a 6% levy (2% of gross receipts from producers and 4% from the federal government). There will be years when each crop's account will have a surplus and years when it will be in a deficit position. If, however, it appears that the level of support is incorrect relative to the 6% levy, it may be necessary to adjust the support levels. By adjusting the support level rather than the levy, one avoids complicated administrative procedures.

OTHER CONSIDERATIONS

1. The proposed solution detailed earlier in this paper may be considered as phase one of a modified WGSP. In phase two, the proposed solution could be modified to have the program function on a provincial basis. In this case, each crop would be assigned its own stabilization fund account by province. Support levels could be based on actual provincial production costs.

2. The proposal could be taken one step further to permit participants to purchase additional protection above the maximums. In this case, the additional protection would be funded only by an additional producer levy and potential payout would be related to this levy.

3. The proposal would partially eliminate a double standard which has existed in regard to the regions of Canada and the farm income stabilization plans. The federal government stabilization program for grain producers outside the Prairie Region is more generous with farmers receiving payments without any contributory assessment based on their marketings. The proposal for prairie grains would be similar to the program for nonprairie grains in that it would provide price stabilization on an individual crop basis for all eligible volumes.

CONCLUSION

In summary the proposed solution addresses the major shortcomings of the WGSP - failure to be product specific, detering better cropping practices, failure to adjust for inflation, lack of timeliness and overlapping with other federal programs.

The Manitoba Government would encourage the federal government to give consideration to the proposed modifications of the WGSP to ensure producers a more effective stabilization program.

TABLE 2.1

Three Possible Indices for
Deflating Farm Product Prices in a Stabilization Program

1961 - 1983

	Farm Input Price Index[1]	Gross National Expenditure Implicit Price Index (1971 = 100)	Consumer Price Index[2]
1961	73.6	72.4	75.0
1962	78.9	73.4	75.8
1963	81.4	74.8	77.2
1964	81.2	76.6	78.6
1965	84.0	79.1	80.5
1966	88.7	82.6	83.5
1967	89.5	85.9	86.5
1968	92.4	88.7	90.0
1969	95.8	92.6	94.1
1970	96.4	96.9	97.2
1971	100.0	100.0	100.0
1972	107.0	105.0	104.8
1973	125.0	114.6	112.7
1974	145.3	132.1	125.0
1975	164.0	146.3	138.5
1976	174.9	160.4	148.9
1977	179.5	172.3	160.8
1978	203.0	183.8	175.2
1979	237.9	202.7	191.2
1980	261.7	225.8	210.7
1981	303.2	249.7	237.0
1982	312.3	275.5	262.6
1983	311.3	290.5	277.7

[1]Western Canada, Total.

[2]All Canada, Total.

SOURCE: Statistics Canada

APPENDIX 1

OTHER ALTERNATIVES CONSIDERED

APPENDIX 1

Alternatives Considered

1. HAVE A PROGRAM WHICH WOULD GUARANTEE PRODUCERS EACH YEAR THE COST OF PRODUCTION

A fund would be established out of which producers would be paid any deficiency between market prices and the cost of production, and into which producers would pay any excess of market prices over the cost of production. Any deficits in the fund would nave to be financed by the federal government.

It is evident that this alternative depends critically on the formula or model used to determine the cost of production and the procedure used to update it. Questions also arise as to how to enforce rules requiring excess monies to be paid into the fund and how to prevent an oversupply of product due to incentive levels of cost of production prices.

2. STABILIZE WESTERN GRAINS AND OILSEEDS UNDER THE AGRICULTURAL STABILIZATION ACT (ASA)

This Act provides mandatory support for a variety of cash crops grown in eastern Canada, but expressly excludes the seven crops named in the WGSA. Other western crops such as sunflower, buckwheat and legume seeds can be supported if Cabinet approves a request for such assistance. The assistance given would be at 95% of the previous five-year average price adjusted for inflation.

The ASA approach has two major flaws. Firstly, since relatively depressed prices generally occur for two or more years in succession, the five-year average tends to concentrate support payments in the early years of a depressed price period. It can generate perverse results. Secondly, it does not deal effectively with inflation of production costs.

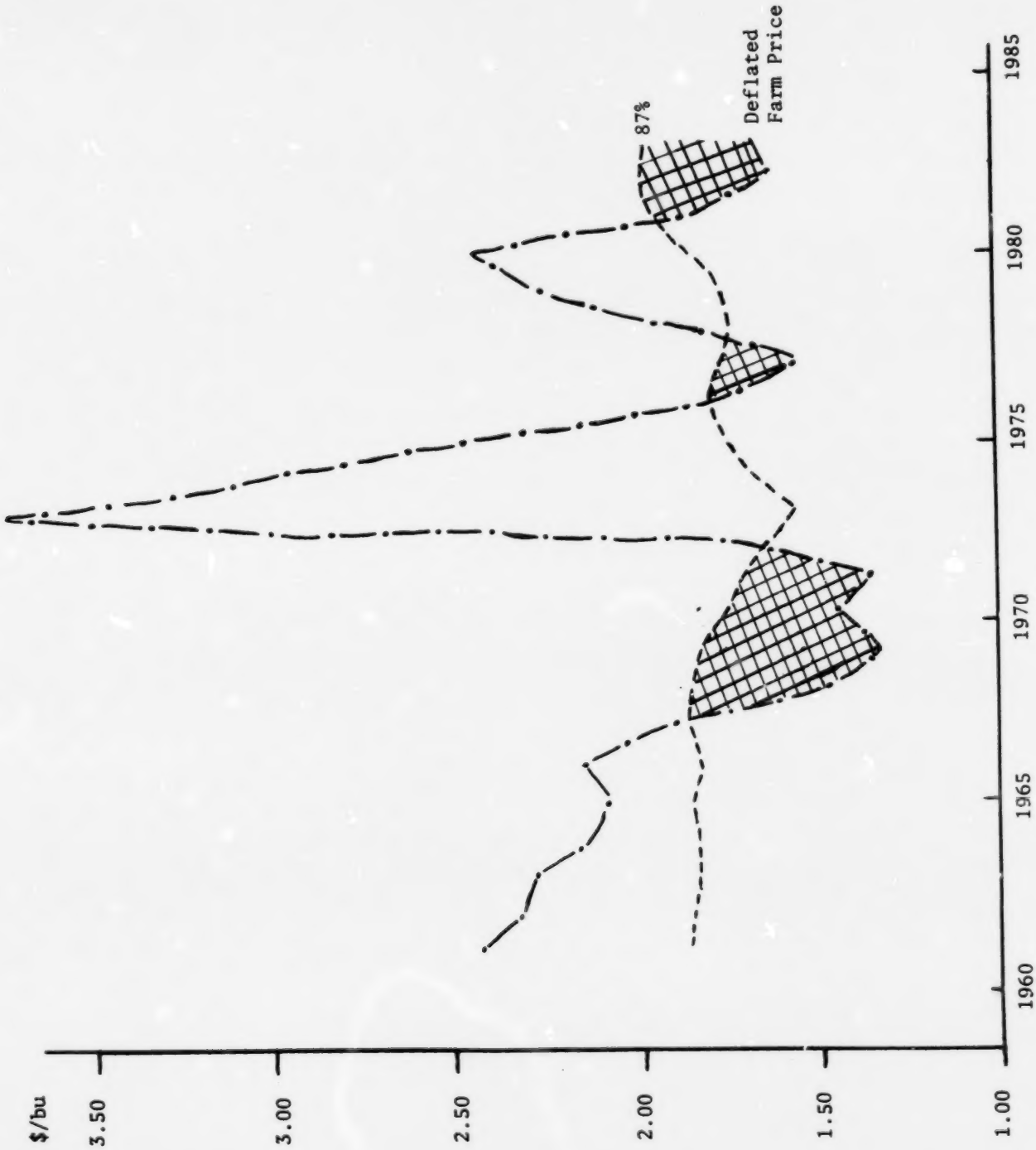
APPENDIX 2

ADDITIONAL DATA

FIGURE 2.1

Illustration of Deficiency Payments Program with Support at 87% of the Previous 10-Year Average Deflated Farm Price

WHEAT
1961 - 1983



Approximate Level of Support Provided by a 6% Premium of Sales

Calculated Over 23 Years

Crop	Support Level	Payout No. Out of 23 Years
Wheat	87%	9
Canola	87	8
Mustard Seed	82	7
Barley	80	8
Corn	80	4
Oats	79	9
Flaxseed	76	7
Sunflowers	75	4
Rye	77	4

TABLE 2.2

Sample Calculation of Proposal for Wheat

1976 - 1983

Year	Manitoba Crop Deliveries	Farm Price	Deflated Farm Price	10-Year Average Lagged Deflated Farm Price	79% Support	Deficiency Payment Deflated	Deficiency Payment Current
	('000 bushels)			$ per Bushel			
1976	64,091	2.80	1.60	1.97	1.56	-	-
1977	70,494	2.67	1.48	1.93	1.52	0.04	0.07
1978	92,502	3.61	1.79	1.90	1.50	-	-
1979	70,320	4.62	1.94	1.95	1.54	-	-
1980	89,949	5.52	2.11	2.05	1.62	-	-
1981	69,912	4.59	1.51	2.13	1.68	0.17	0.52
1982	103,298	4.48	1.43	2.16	1.71	0.28	0.87
1983	127,457	4.89	1.57	2.12	1.67	0.10	0.31

Total Pay In = Sum of (crop deliveries x price/bushel x 6%).

Total Pay Out = Sum of (crop deliveries in payout years x deficiency payment/bushel).

Total Pay In = Total Pay Out.

TABLE 2.3

Sample Calculation of Proposal for Barley

1976 - 1983

Year	Manitoba Crop Deliveries	Farm Price	Deflated Farm Price	10-Year Average Lagged Deflated Farm Price	65% Support	Deficiency Payment Deflated	Deficiency Payment Current
	('000 bushels)			$ per Bushel			
1976	29,007	2.00	1.14	1.26	0.82	-	-
1977	44,738	1.65	0.92	1.25	0.81	-	-
1978	53,494	1.69	0.82	1.24	0.81	-	-
1979	47,730	2.24	0.94	1.25	0.81	-	-
1980	42,278	2.98	1.14	1.28	0.83	-	-
1981	45,659	2.50	0.82	1.32	0.86	0.04	0.12
1982	62,198	1.98	0.63	1.34	0.87	0.24	0.75
1983	62,542	2.61	0.84	1.28	0.83	-	-

TABLE 2.4

Sample Calculation of Proposal for Oats

1976 - 1983

Year	Manitoba Crop Deliveries	Farm Price	Deflated Farm Price	10-Year Average Lagged Deflated Farm Price	66% Support	Deficiency Payment Deflated	Deficiency Payment Current
	('000 bushels)	- $ per Bushel -					
1976	16,598	1.13	0.65	0.86	0.57	-	-
1977	16,843	0.99	0.55	0.84	0.55	-	-
1978	18,376	0.99	0.49	0.82	0.54	0.05	0.10
1979	7,509	1.37	0.58	0.82	0.54	-	-
1980	2,503	1.84	0.70	0.83	0.54	-	-
1981	2,762	1.48	0.49	0.84	0.55	0.06	0.18
1982	5,492	1.25	0.40	0.85	0.56	0.16	0.50
1983	4,779	1.70	0.55	0.80	0.53	-	-

TABLE 2.5

Sample Calculation of Proposal for Flaxseed

1976 - 1983

Year	Manitoba Crop Deliveries	Farm Price	Deflated Farm Price	10-Year Average Lagged Deflated Farm Price	65% Support	Deficiency Payment Deflated	Deficiency Payment Current
	('000 bushels)			$ per bushel			
1976	7,609	6.78	3.88	3.94	2.56	-	-
1977	4,814	5.25	2.92	4.03	2.62	-	-
1978	10,346	6.81	3.55	3.99	2.59	-	-
1979	9,212	7.11	2.99	4.05	2.63	-	-
1980	14,484	8.13	3.11	4.12	2.68	-	-
1981	8,389	8.19	2.70	4.23	2.75	0.05	0.15
1982	7,948	6.20	1.99	4.32	2.81	0.82	2.58
1983	12,232	7.36	2.36	4.11	2.67	0.31	0.96

TABLE 2.6

Sample Calculation of Proposal for Rye

1976 - 1983

Year	Manitoba Crop Deliveries	Farm Price	Deflated Farm Price	10-Year Average Lagged Deflated Farm Price	56% Support	Deficiency Payment Deflated	Deficiency Payment Current
	('000 bushels)			$ per Bushel			
1976	2,700	2.14	1.22	1.36	0.76	-	-
1977	3,300	2.19	1.22	1.36	0.76	-	-
1978	3,900	2.60	1.28	1.36	0.76	-	-
1979	3,150	3.68	1.55	1.39	0.78	-	-
1980	2,940	4.37	1.67	1.48	0.83	-	-
1981	6,900	3.55	1.17	1.57	0.88	-	-
1982	8,000	2.21	0.71	1.63	0.91	0.20	0.62
1983	6,420	2.54	0.82	1.57	0.88	0.06	0.19

TABLE 2.7

Sample Calculation of Proposal for Rapeseed/Canola

1976 - 1983

Year	Manitoba Crop Deliveries	Farm Price	Deflated Farm Price	10-Year Average Lagged Deflated Farm Price	68% Support	Deficiency Payment Deflated	Deficiency Payment Current
	('000 bushels)			$ per Bushel			
1976	9,152	5.82	3.33	3.22	2.19	-	-
1977	5,647	6.31	3.52	3.28	2.23	-	-
1978	11,332	6.35	3.13	3.43	2.33	-	-
1979	20,834	6.05	2.54	3.57	2.43	-	-
1980	20,803	6.35	2.43	3.61	2.45	0.02	0.05
1981	12,081	6.23	2.05	3.63	2.47	0.42	1.27
1982	13,792	5.88	1.88	3.65	2.48	0.60	1.87
1983	15,781	8.50	2.73	3.53	2.40	-	-

TABLE 2.8

Sample Calculation of Proposal for Corn

1976 - 1983

Year	Manitoba Crop Production ('000 bushel)	Farm Price	Deflated Farm Price	10-Year Average Lagged Deflated Farm Price	54% Support	Deficiency Payment Deflated	Payment Current
		¢ per Bushel					
1976	1,150	3.02	1.73	1.87	1.01	-	-
1977	1,550	2.62	1.46	1.88	1.02	-	-
1978	5,800	2.80	1.38	1.86	1.00	-	-
1979	7,800	3.15	1.32	1.87	1.01	-	-
1980	7,500	3.40	1.30	1.88	1.02	-	-
1981	17,000	2.72	0.90	1.86	1.00	0.10	0.30
1982	10,000	2.66	0.85	1.84	0.99	0.14	0.44
1983	9,000	3.50	1.12	1.77	0.94	-	-

TABLE 2.9

Sample Calculation of Proposal for Mustard Seed

1976 - 1983

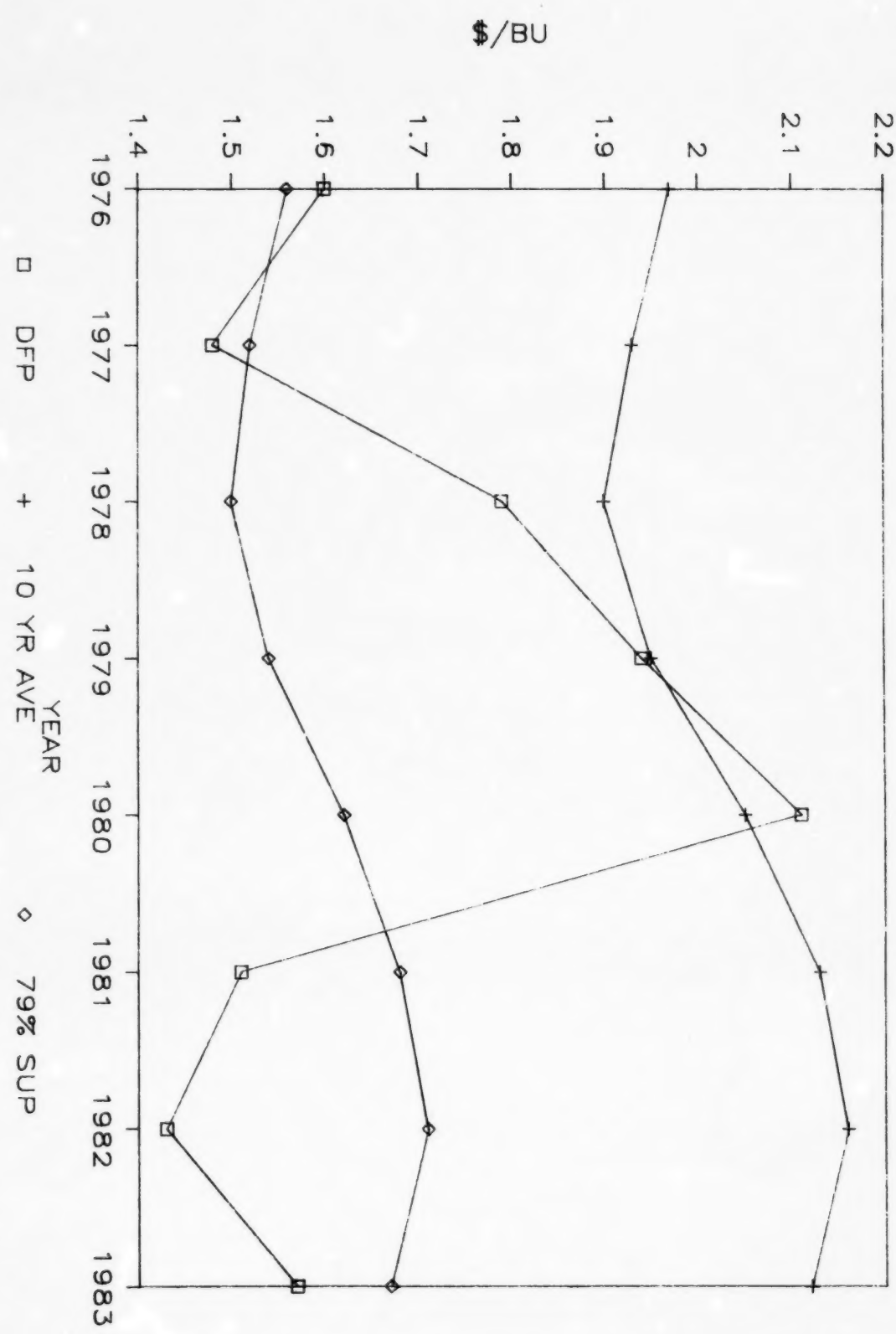
Year	Manitoba Crop Production	Farm Price	Deflated Farm Price	10-Year Average Lagged Deflated Farm Price	73% Support	Deficiency Payment Deflated	Deficiency Payment Current
	('000 Pounds)	¢ per Pound					
1976	14,400	11.2	6.4	6.4	4.7	-	-
1977	36,000	10.5	5.8	6.4	4.7	-	-
1978	64,000	11.0	5.4	6.4	4.7	-	-
1979	21,000	10.0	4.2	6.5	4.7	0.5	1.2
1980	36,000	15.0	5.7	6.6	4.8	-	-
1981	42,000	17.3	5.7	6.8	5.0	-	-
1982	23,500	10.9	3.5	7.1	5.2	1.7	5.3
1983	25,500	14.0	4.5	7.0	5.1	0.6	1.9

TABLE 2.10

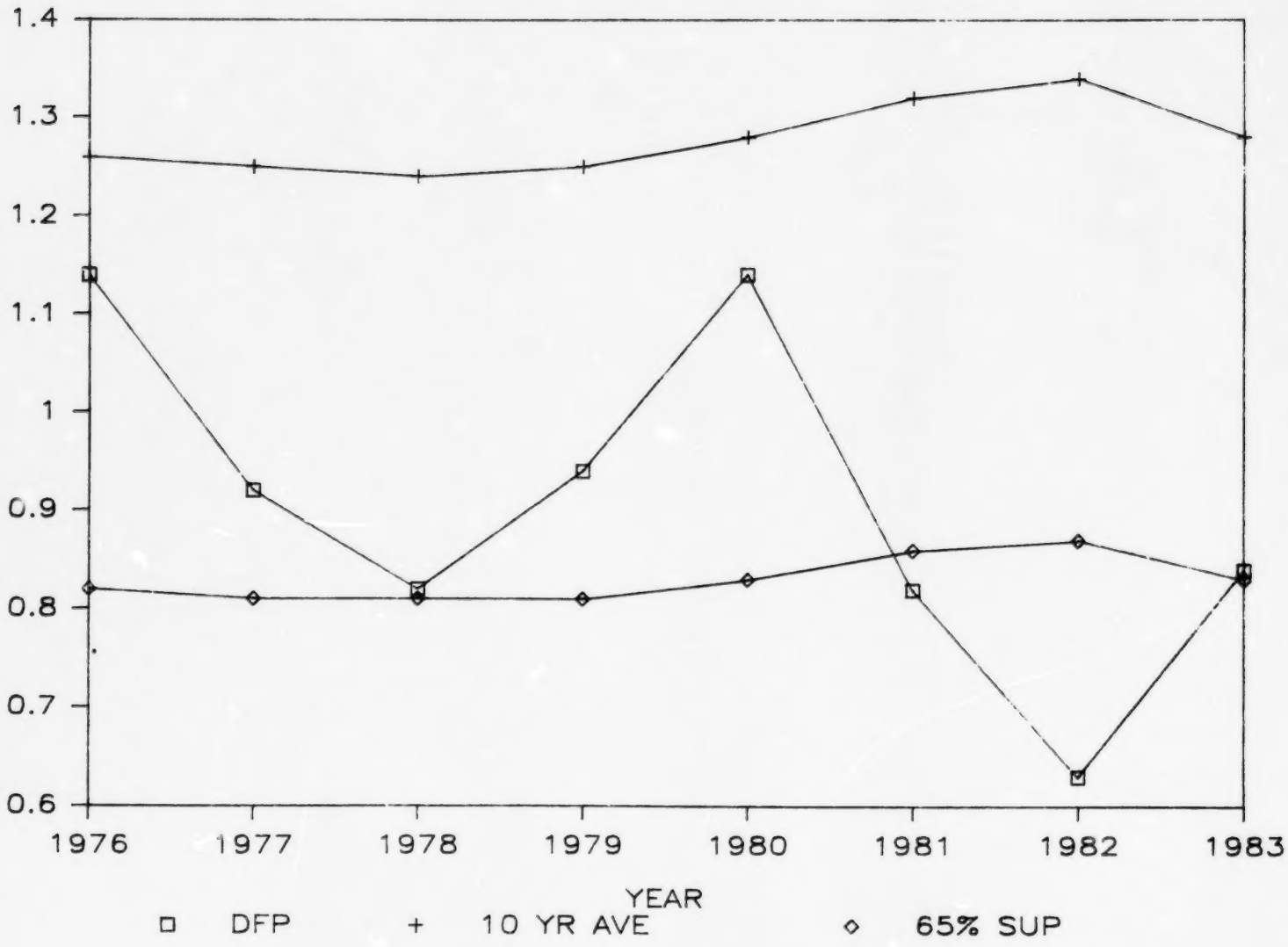
Sample Calculation of Proposal for Sunflowers

Year	Manitoba Crop Production ('000 Pounds)	Farm Price	Deflated Farm Price	10- Year Average Lagged Deflated Farm Price	56% Support	Deficiency Payment Deflated	Deficiency Payment Current
		¢ per Pound					
1976	53,000	10.0	5.7	7.6	4.3	-	-
1977	175,000	11.5	6.4	7.5	4.2	-	-
1978	254,000	11.0	5.4	7.7	4.3	-	-
1979	460,000	11.0	4.6	7.7	4.3	-	-
1980	350,000	10.0	3.8	7.7	4.3	0.5	1.3
1981	350,000	10.3	3.4	6.7	3.8	0.4	1.2
1982	192,500	9.0	2.9	7.4	4.1	1.2	3.7
1983	100,000	15.0	4.8	7.0	3.9	-	-

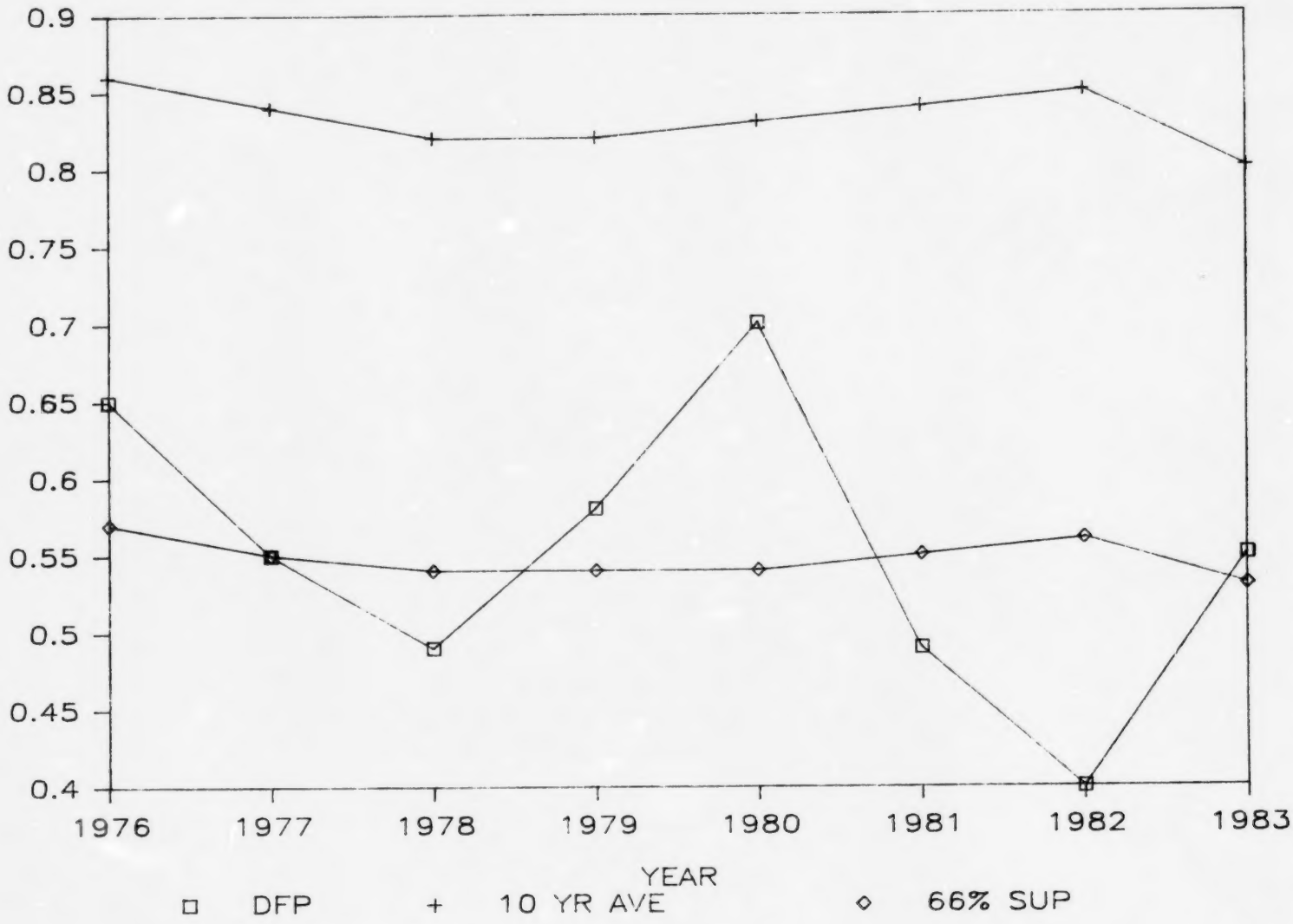
APPENDIX 3

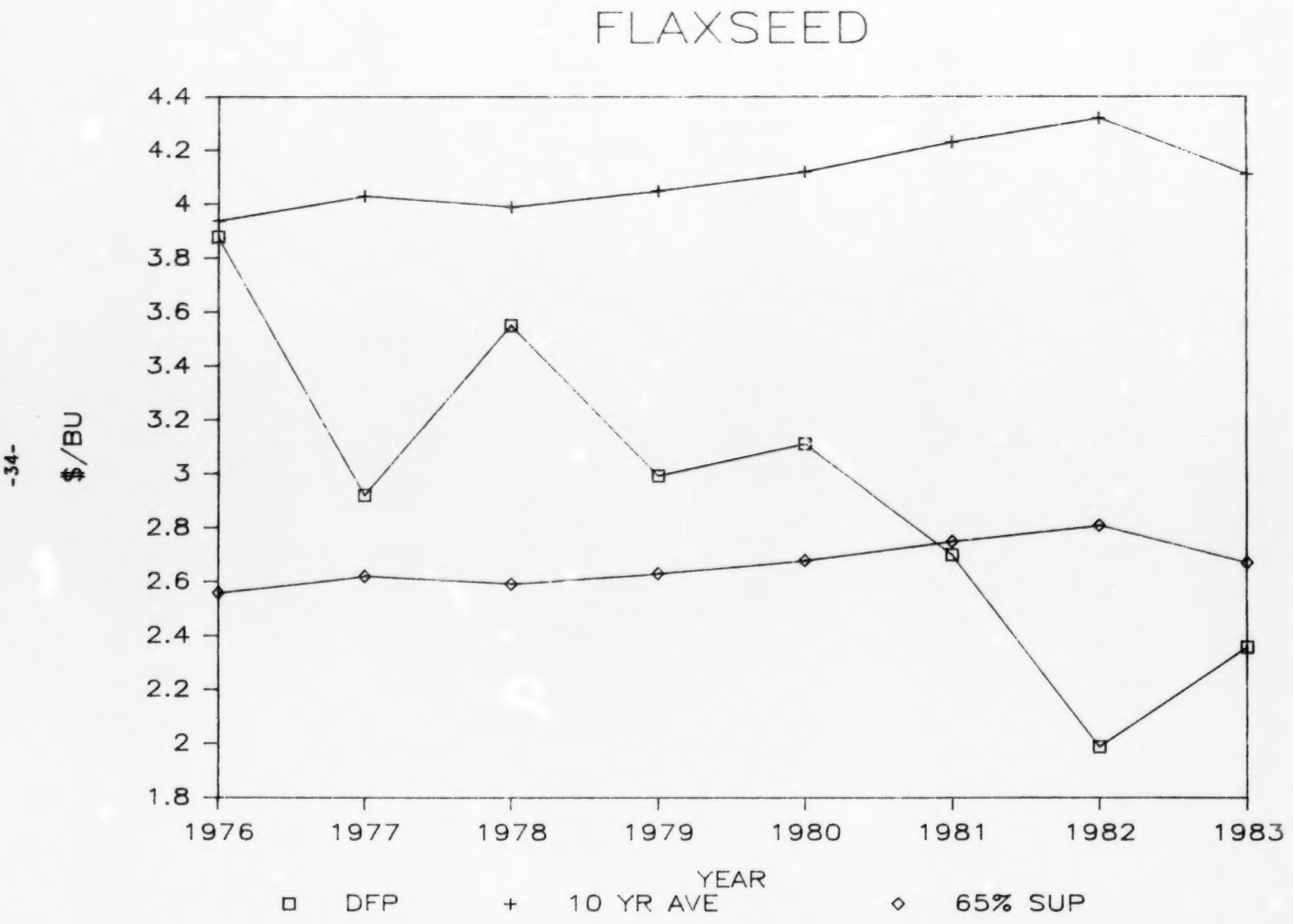

WHEAT
$/BU
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
1976
1977
1978
1979
1980
1981
1982
1983
YEAR
□ DFP
+ 10 YR AVE
◇ 79% SUP

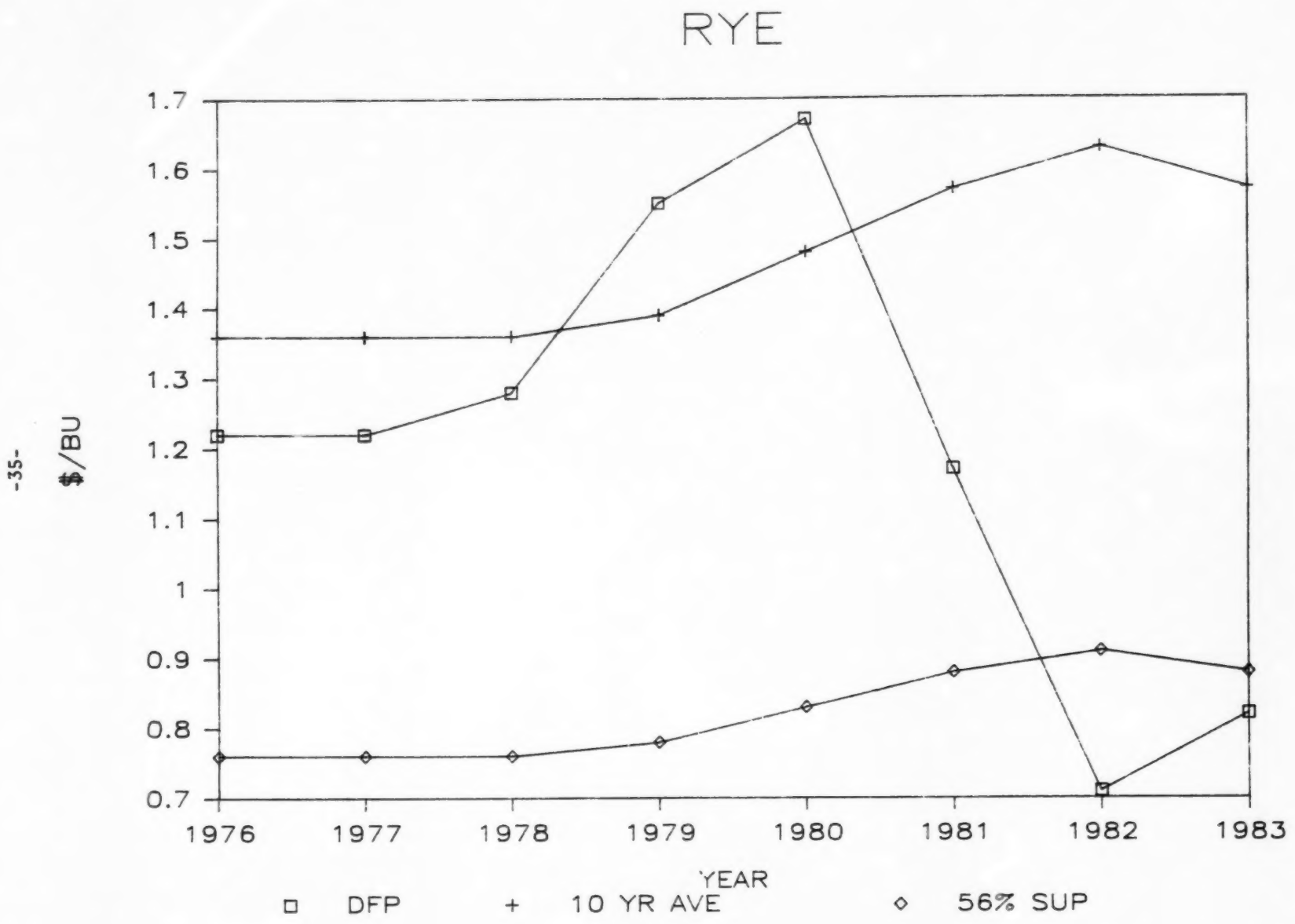
BARLEY


1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
0.6
$/BU
1976
1977
1978
1979
1980
1981
1982
1983
YEAR
DFP
10 YR AVE
65% SUP

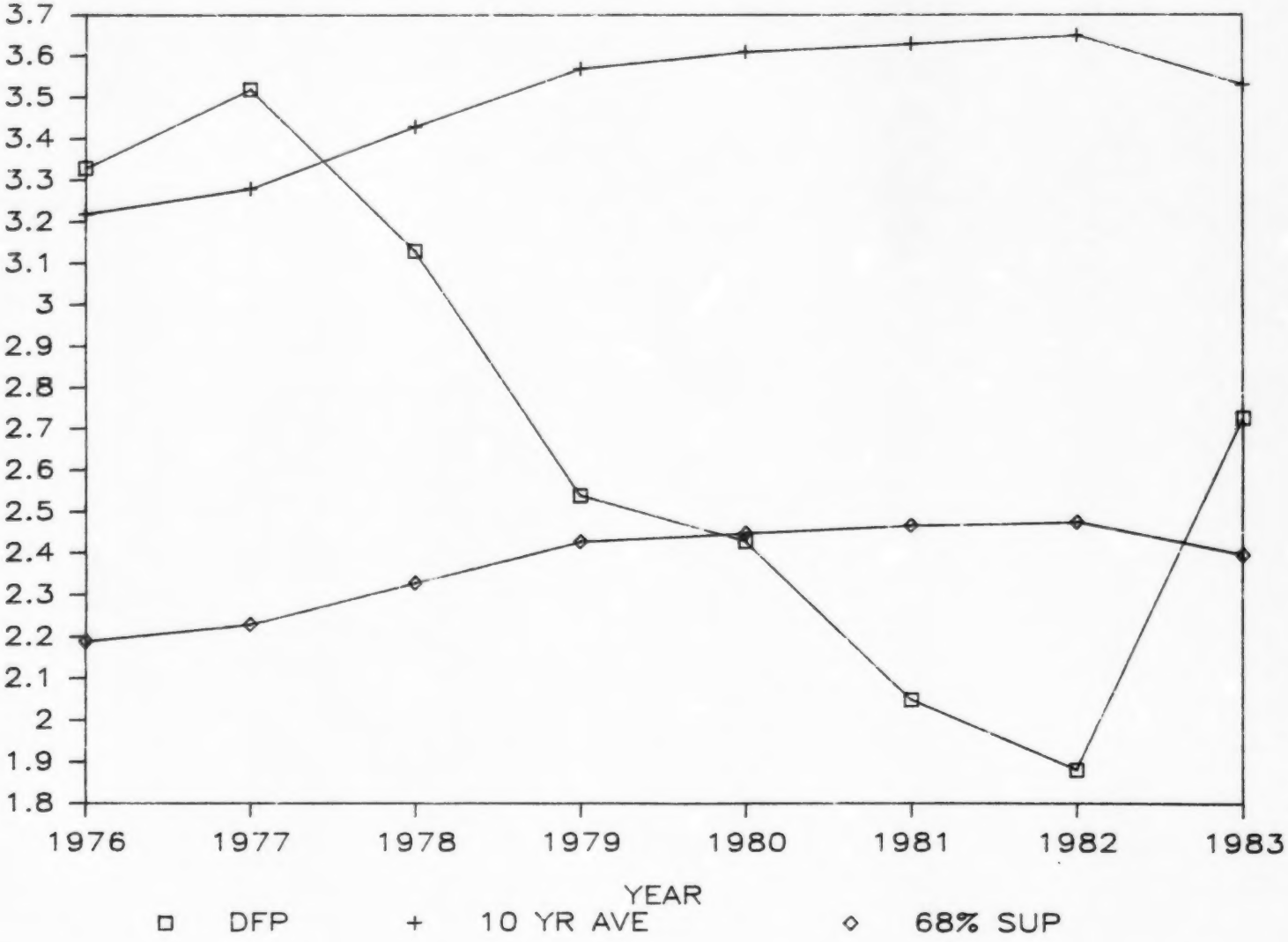
OATS

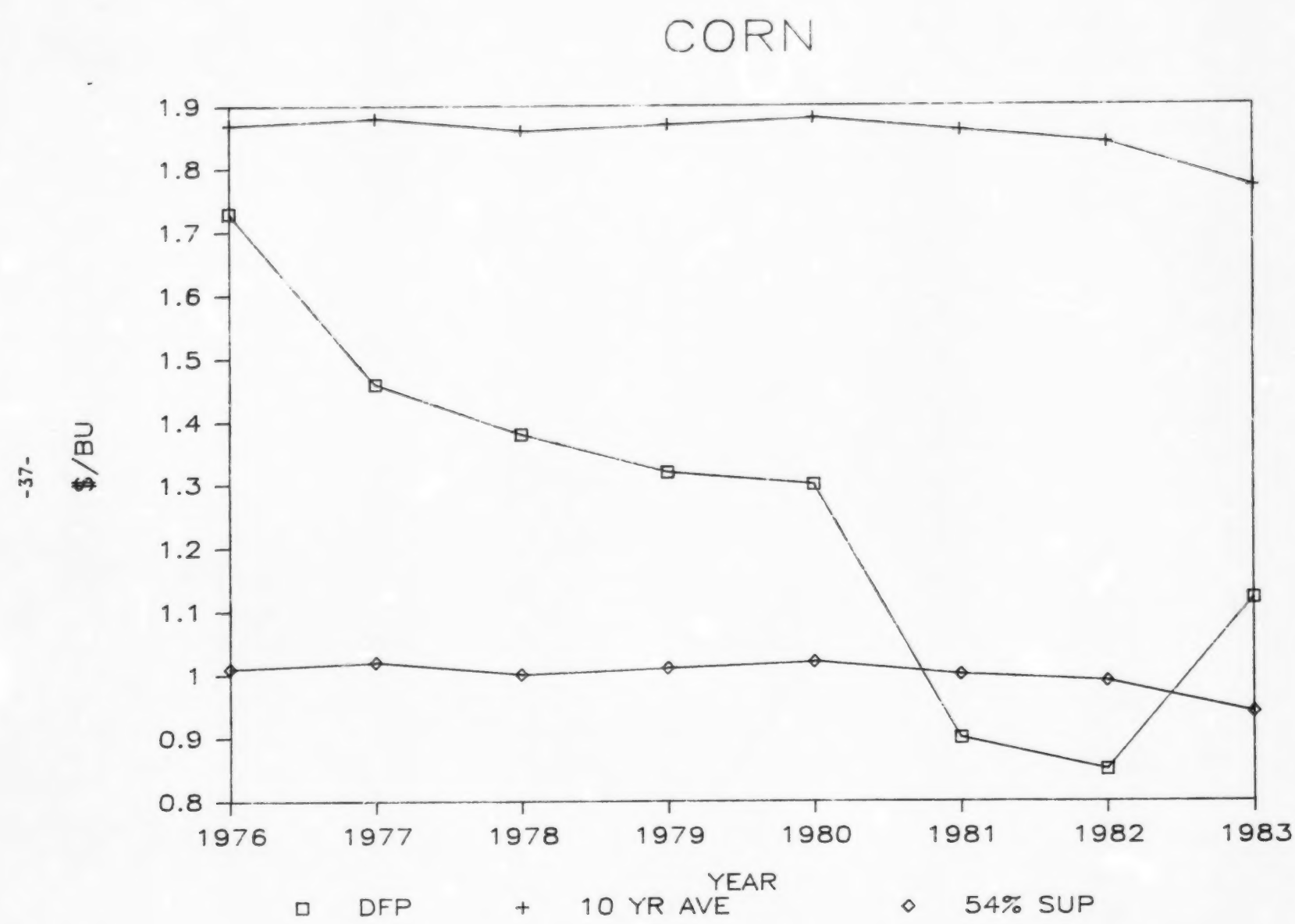

0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
$/BU
1976
1977
1978
1979
1980
1981
1982
1983
YEAR
DFP
10 YR AVE
66% SUP


FLAXSEED
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
$/BU
1976
1977
1978
1979
1980
1981
1982
1983
YEAR
DFP
10 YR AVE
65% SUP

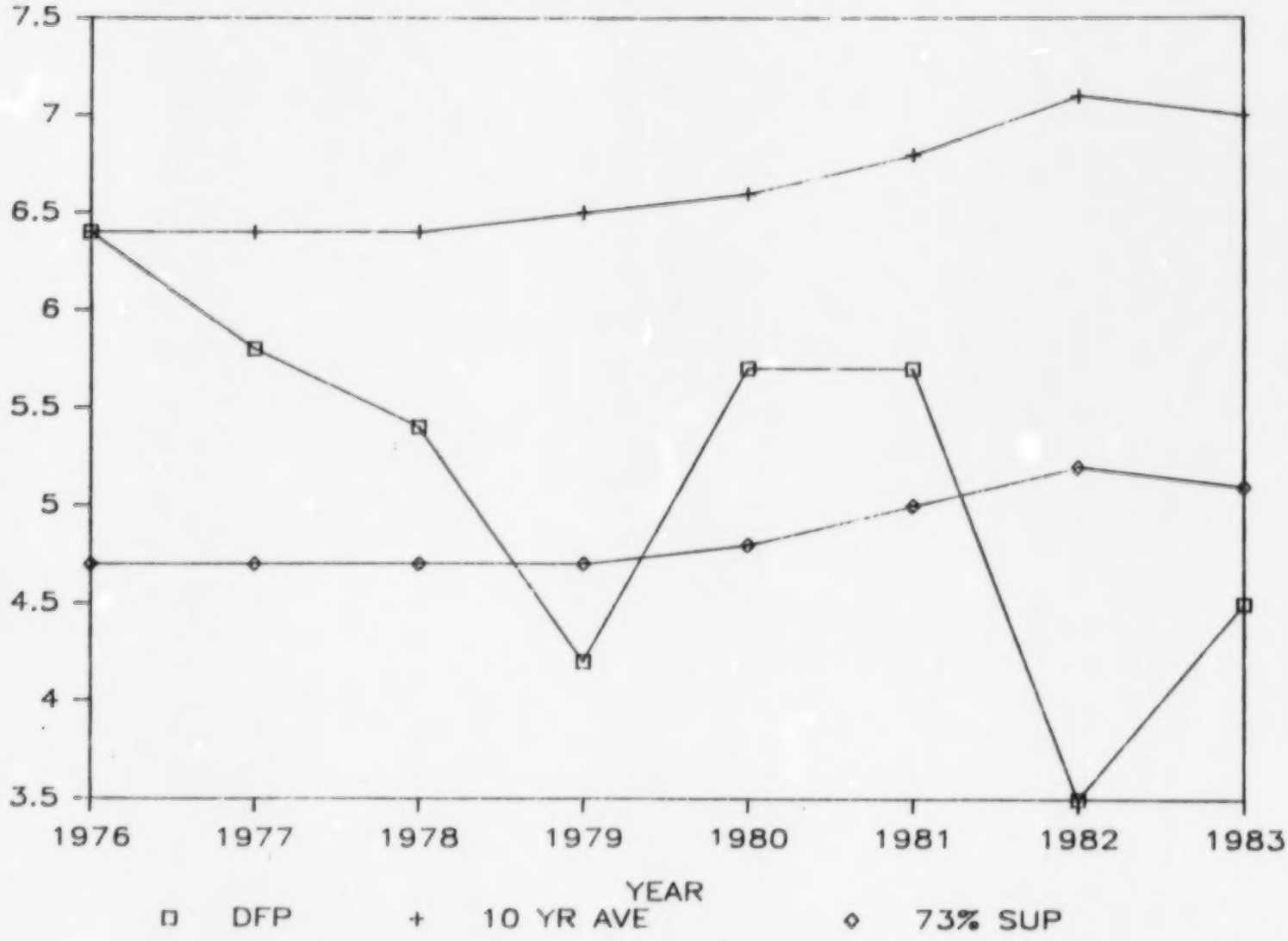

RYE
$/BU
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
1976
1977
1978
1979
1980
1981
1982
1983
YEAR
DFP
10 YR AVE
56% SUP

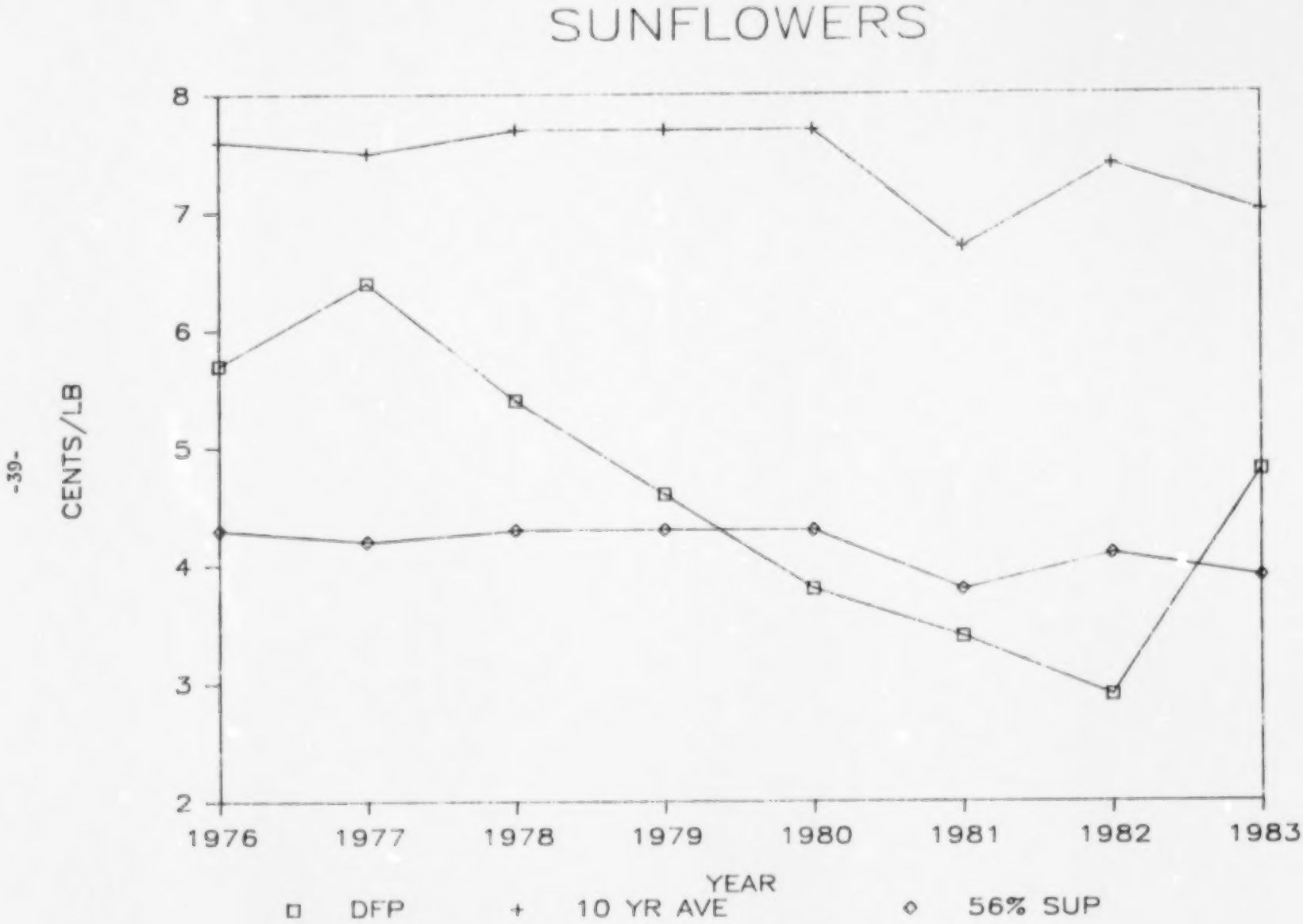
RAPESEED


$/BU
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1976
1977
1978
1979
1980
1981
1982
1983
YEAR
DFP
10 YR AVE
68% SUP


CORN
$/BU
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
1976
1977
1978
1979
1980
1981
1982
1983
YEAR
DFP
10 YR AVE
54% SUP

MUSTARD SEED




SUNFLOWERS
CENTS/LB
8
7
6
5
4
3
2
1976
1977
1978
1979
1980
1981
1982
1983
YEAR
DFP
10 YR AVE
56% SUP